39. The SmaI/SmaI fragment encoding HCMV pp28, or antigenic portions thereof that elicit antibodies that immunologically bind to pp28, within the HindII R fragment from the genome of human cytomegalovirus.

REMARKS

With entry of the above amendment, claims 19-39 are pending. Applicants have amended claim 19 to more particularly point out and distinctly claim the subject matter Applicants regard as their invention. Applicants respectfully point out that the substance of the amended and added claims are fully supported by the specification. Support for the supplemental amendment to claim 19 may be found throughout the specification, for example, page 1, lines 8-24; and claims 2 and 8 as originally filed. Support for claims 25-36 may be found throughout the specification, for example, page 1, lines 8-24; page 3, lines 14-26; figure 1; and original claims 2, 7, and 8, among other places. Support for claim 37 may be found throughout the specification, for example, page 3, lines 20-23; Examples 1 and 2; and Figure 1. Support for the corresponding host cells of claim 38 may be found on page 4, line 26; Examples 1 and 2; and claims 5 and 6 as originally filed. Support for claim 39 may be found throughout the specification, for example, Figure 1, and claim 2 as originally filed.

I. Rejections Under 35 U.S.C. § 112

The Office rejected claim 19 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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Applicants regard as their invention. (Office Action at page 3, paragraph 2.) Applicants respectfully traverse this objection.

The Office has rejected claim 19 under 35 U.S.C. § 112, second paragraph, on the grounds that claim 19 is indefinite in reciting "does not comprise the 6.5 kB HindIII R fragment from the genome of human cytomegalovirus strain AD169" since the metes and bounds of the claim are not clear. (Office Action at page 4, paragraph 3.) The Office questions whether the claim encompasses the entire HCMV genome, or fragments that comprise the portion of the genome that encode HCMV pp28, or fragments larger that the HindIII R fragment in any and all HCMV strains. Applicants have amended claim 19 to more particularly point out and distinctly claim the subject matter Applicants regard as their invention. Applicants submit that amended claim 19 is definite, and respectfully request that the rejection be withdrawn.

II. Rejection Under 35 U.S.C. § § 102(b) and 103

The Office has rejected claims 19 and 22 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 (a) as obvious over *Ihara et al.* (Office Action at page 5, paragraph 3.) The Office alleges that *Ihara* discloses a cosmid clone and bacteria containing the HindIII DNA structure of human cytomegalovirus Towne strain that inherently contains the DNA encoding the phosphoprotein which is either the same as, or an obvious variant of, the HCMV pp28 of strain AD169. Applicants respectfully traverse this rejection.

In order for a single prior art reference to anticipate a claim under 35 U.S.C. 102(b), all elements of the claim must be disclosed in that reference. Here, *Ihara* does not disclose each element of claims 19, 22, or the newly added claims. Specifically, claim 19 defines a DNA molecule that does *not comprise HindIII R fragments* from the genome of human

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cytomegalovirus. In contrast, *Ihara* discloses the HindIII cleavage map, which *consists* of HindIII fragments. *Ihara* does not discloseof any DNA fragments that do not comprise a HindIII R fragment of HCMV and that encode pp28 or antigenic portions thereof. Therefore, *Ihara* does not disclose every element of independent claim 19 or dependent claim 22. For these reasons, claims 19 and 22 are not anticipated by *Ihara*, and this rejection should be withdrawn.

Also, claims 19 and 22 would not have been obvious under 35 U.S.C. § 103 (a) over *Ihara*. The Office states that HCMV pp28 is an obvious variation of *Ihara*, which discloses a cosmid clone and bacteria containing the HindIII DNA structure of HCMV Towne strain. As stated above, *Ihara* does not teach or suggest a DNA molecule encoding HCMV pp28 as claimed in claims 19 or 22. Furthermore claims 19 and 22 could not be arrived at through obvious variation of the teachings of *Ihara*. Nothing in *Ihara* suggests or provides motivation to modify *Ihara* to make the claimed invention. The Applicants localized the gene that encoded HCMV pp28 to a particular portion of a complete HindIII fragment. While *Ihara* taught HindIII cleavage maps of HCMV, it never identified DNA encoding pp28 or antigenic portions thereof. Therefore, *Ihara* does not teach or suggest claim 19 or dependant claim 22. *Ihara* also fails to suggest or disclose the DNA molecules of new claims 25-39. Finally, the Office has not shown that *Ihara* provides a reasonable expectation of success in arriving at the claimed invention.

In view of the above arguments, Applicants respectfully submits that the claimed composition would not have been obvious to one of ordinary skill in the art at the time the invention was made.

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In view of the foregoing amendments and remarks, Applicants respectfully request the reconsideration and reexamination of the pending claims and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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